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W3ILN Limited
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United Kingdom

Patents ADP number (if you know it)

8548836001

If the applicant is a corporate body, give the country/state of its incorporation

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4. Title of the invention Improvements in Web Servers

5. Name of your agent (if you have one)

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Description 18

Claim(s) 4

Abstract 1

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Improvements in Web Servers

This invention relates to systems and web pages for improving use of the Internet. It is known to use a web browser which displays a web page in its main window and which
5 has a stored list of web links or internet short cuts sometimes called "favourites" and in this specification called "links", which can be edited by a user. Consequently a user can store links for websites and pages, which the user uses regularly, can return to these sites and pages by selecting the stored links without needing to remember the correct url address. However these links are stored locally on the user computer (web client),
10 which was used when the links were stored. Should the user use a different computer such as at work, whilst visiting others or in an internet cafe or library then these links are inaccessible.

It is also known to provide websites that harness so called "dynamic" html that alters
15 the html of the site when a user fulfils a predetermined function such as clicking on or moving a cursor over a menu. However, the html is altered in a manner predetermined by the web designer and not by the user and consequently always alters in the same manner regardless of the needs of the user.

20 It is an object of the invention to provide improvements on such systems and in particular to help users who wish to use stored links on independent computers. It is also an object of the invention to provide formatted areas of a web page and/ or browser that can be created and/or altered.

25 According to a first aspect of the invention there is provided a web server comprising a memory and providing an interface for use by a remote user, preferably for navigating web pages, which interface is editable/alterable by a remote user such as in appearance and/or function.

Preferably the interface includes web links such as short cuts to web pages which can be used by a remote user to access web pages, wherein more preferably the links can be created, deleted and/or edited by a remote user.

- 5 Preferably the interface comprises formatted areas at least some of which can be altered in appearance by a remote user, more preferably the user may select the appearance of the area from a list of available appearances stored in the memory of the web server. Preferably still the list of appearances of formatted areas stored in the memory can be added to or otherwise edited remotely of the web server.

10

Preferably the interface comprises dynamic html such as in the form of drop down menus and more preferably the dynamic html can be edited remotely by a user and the edited dynamic html used by the remote user. Preferably still the dynamic html can be edited and used completely over the internet.

15

Preferably any activity which a user is enabled to perform by the web server can be done independently of the location and/or computer and/or local memory the user has when accessing the web server.

- 20 Preferably the web server can be used by multiple users, more preferably each user can be identified and the interface provided to them depending on that identification, preferably still whereby edits performed by one identified user are stored in the web server memory independently of a differently identified user and an interface corresponding to the edits stored for the respective identified user is provided to that
- 25 user.

According to a second aspect of the invention there is provided a web server hosting a web page, the web page incorporating dynamic html, wherein the dynamic html can be edited by a user viewing the web page remotely.

30

The invention and/or interface of the invention may comprise a website, web page, browser and/or browser plug-in.

Any feature described in this specification relating to the invention may be combined with any other feature described herein so as to define independent or dependent features of the invention.

5

An embodiment of the invention will now be described, by way of example only, with reference to the accompanying drawings in which:

10

Figure 1 is an overview of the architecture of the system according to the invention,

Figure 2 is a view of elements of a home page according to the invention,

Figure 3 is a flow diagram of the process of the user accessing a web page by selecting a link,

15

Figure 4 is a view of elements of the home page of Figure 2 in a different configuration,

Figure 5 is a flow diagram of the process of a user logging in,

20 Figure 6 is a view of a set up page for updating links,

Figure 7 is a flow diagram of the process of a user modifying links in the menu,

25

Figure 8 is a flow diagram of the process of uploading links from a PC,

Figure 9 is a view of a web page for importing links,

Figure 10 is a view of a urlist.txt file when importing links,

30 Figure 11 is view of a web page displaying imported links,

Figure 12 is a view of the set up web page of Figure 6 with added links,

Figure 13 is a close up view of the "move link" in Figure 12.

Figure 14 is a view of a set up page for moving links,

5 Figure 15 is a view of a page that requests log in details from a client,

Figure 16 is a view of a page allowing a client to create or modify skins,

Figure 17 is a view of a page of the first tab from a menu for creating skins,

10

Figure 18 is a view of the page of Figure 17 in a second configuration,

Figure 19 is a view of a page of the second tab from a menu for creating skins,

15 Figure 20 is a view of a page of the third tab from a menu for creating skins,

Figure 21 is a view of a page of the fourth tab from a menu for creating skins,

20 Figure 22 is a view of a page of the fifth tab from a menu for creating skins which displays a preview of the skin,

Figure 23 is a view of a page displaying submitted skins to administrators,

25

Figure 24 is a view of a page of the first tab from a menu for a user to manage skins,

Figure 25 is a view of a page of the second tab -from a menu for a user to manage skins allowing the user to purchase skins,

30

Figure 26 is a view of a page of the third tab from a menu for a user to manage skins,

Figure 27 is a view of a page of the fourth tab from a menu for a user to manage skins allowing a user to select a search engine, and .

Figure 28 is a view of a feedback page using which a user may send messages to the creator of a skin.

5

Referring to Figure 1 there is shown a system 10 according to the invention comprising a web server 12, operator PC 14, client PCs (Personal computers) 16 and 18 and user PC's 20, 22 & 24.

- 10 The web server 12 comprises a processor 26 in communication with a memory including a client identification database 27, a pending skins database 28, a live skins database 30, a user identification database 32 and a user information database 34. Stored in the memory is a multitude of web pages 38, 40, 42, 46, 48 and 50 each corresponding to one or more of the databases 28, 30, 32 & 34, the web pages being
15 transmitted in response to requests from remote PCs such as the operator PC 14, client PC's 16 & 18 or web user PC's 20, 22 & 24.

- Each user PC 20, 22 & 24 includes a local PC memory 36. The local PC memory 36 has a web browser stored in it, the browser able to request web pages from the web
20 server 12 and communicate with the web server 12 via these web pages.

- Each user PC 20, 22 & 24 interfaces with the web server 12 via an individual web page or web pages 38, 40 & 42. The web pages 38, 40 & 42 corresponding to information stored in identification database 32 whereby each of the individual web page or pages
25 38, 40 & 42 being uniquely identified with information corresponding to a user U. The identification database 32 communicates with the user information database 34 thereby displaying information specific from the user information database to each identified user on their respective web page 38, 40 or 42.

- 30 There is also a communication channel 44 from the web server 12 to the client PC's 16 & 18 which is usable by a user PC 20 via a user web page 38 to communicate with the

client PC 16 or 18. The communication channel 44 may take the form of a mail server allowing electronic messages such as emails to be sent to the client PC 18.

5 The client PCs 16 & 18 also comprise web browsers, which web browsers can be used to request client web pages 46 & 48 from the web server 12. The client PCs 16 and 18 are able to interface with the client identification database 27 via these web pages 46, 48.

10 The operator PC 14 also comprises a web browser, the web browser being useable to request and operate an operator web page or web pages 50 from the web server 12. The operator PC 14 is able to view information stored in the pending skins database 28 and is able to transmit information to the live skins database 30 the operator web page 50. There is also a operators communication channel 52 similar to the first communication channel 44 allowing electronic messages such as emails to be sent by the operator's PC
15 via the web page 50 to a client PC 16 or 18.

In Figure 2 is shown elements of a typical home page 100 presented to a user when logged in and forms one of the user web pages 38. The home page 100 comprises two frames, first frame 102 and second frame 104. In the particular embodiment shown in
20 Figure 2, the first frame 102 occupies 8% of the page hi-lighted and contains tabulated html created by PHP coding. The first frame 102 occupies a parallel sided horizontal slice of the web page 100. In alternative embodiments first frame 102 may also comprise a vertical section running down the left or right hand side of the web page 100 and could typically occupy any amount of the page from 5% to around 25% of the
25 overall page 100.

First frame 102 comprises a left hand portion 106 and a right hand portion 108. The left hand portion 106 may contain logos, trade marks and other information relating to the company running the web server 12 and also a text box with a submit button. The
30 right hand portion 108, in this example occupying 500 of the total 700 pixels across the width of the page 100, contains a menu of dynamic html which in the configuration in Figure 2 is displayed to the user U as a series of menu headings. The right hand portion

108 also comprises a first formatted area 112, the appearance of which can be selected by the user U as described later in the specification.

5 The second frame 104 in Figure 2 occupies 92% of the page 100 but could typically comprise from around 95% to about 75% of the web page area. The second frame 104 also contains tabulated html created by an embedded scripting language such as by using PHP coding. The second frame 104 comprises a left hand portion 114 and a right hand portion 116. The left hand portion 114 is the same width as left hand portion 106 and contains user configurable links to popular search engine web sites and links to
10 various customised formatted areas that the user U is able to choose.

The right hand portion of the second frame 104 comprises a second formatted area 118.

15 Referring to Figure 3 there is shown the process of selecting web site by way of a short cut stored as links within the dynamic menu 110. At step S122 the user U selects the dynamic menu 110, commonly by clicking with a mouse. Consequently the first and second frames 102 and 104 re-size as shown in Figure 4.

20 In Figure 4 it can be seen that the first frame 102 is enlarged significantly to now occupy 90% of the web page 100 and second frame 104 is correspondingly reduced in size to about 10% of the web page 100.

25 The left hand portion 106 remains the same size as does the electable formatted area 112. The area occupied by the dynamics menu 110 however has increased significantly. The dynamic html of which the menu 110 is comprised is configured such that by selection of the menu 110 the small area merely showing menu headings as displayed in Figure 1 is replaced by the full drop down menu 120 shown in Figure 3. The drop down menu 120 contains links which are in effect short cuts to other web pages.

30 At the next step S125 the user U selects a web site from those listed in the drop down menu 120 and provided at step 126 that the web site selected permits opening within a frame then the process continues to step S128. Certain web sites however do not permit

users to view them in frames and in this case at step S130 a new window is opened with the relevant web site selected. In another embodiment it is also possible for the user U when storing a web site link in the drop down menu 120 to specify that the web page when selected is to open in a new window

5

At step S128 the first and second frames 102 and 104 return to their original size as depicted in Figure 2 with the drop down menu 120 been removed from the visible area. The second formatted area 118 will now contain the web page to which the link which is selected corresponds. Should the dynamic menu 110 be selected again then the frames 102 and 104 will again re-size to the sizes shown in Figure 3. However, the web page displayed in the first formatted area 118 in frame 104 will continue to be shown.

Whilst the selected web page is displayed in the second format area 118 to a user U (or in a new window) the web page displayed is not known to the web server 12. This is because of known and inherent security features within most current browsers that do not allow any java script or other functionality to run within a foreign frame from another frame. So that whilst the web page 100 of the invention resides in the first frame 102 the web server 12 does not query the web address that is currently on display in the second frame 104.

In Figure 5 is shown the process of a user U logging to the system 100. When the user logs in at step S132 he or she is shown the login page, which may be in the form of a splash page, at step S134. At step S136 the process determines whether any user names are registered in the local PC memory 36, if there are the process proceeds to step S138 and if there are not the processor proceeds to step S140.

At step S138 a list of stored user names is displayed to the user U on a web page 38 and once the relevant user name UN is selected by the user U the process continues to step S142. At step S140 a user name is requested at a user name login page forming part of the user web pages 38. Once the user name is entered the process proceeds to step S142.

At step S142 the processor 26 determines whether a password has previously been entered for the entered user name by searching the user identification database 32 and if a password has not been previously entered the system proceeds to step S144 and if one
5 has previously been entered then the process continues to step S150.

At step S144 the user U enters a password along with a user name at step S146. Next at step S148 this password and user name account information is transmitted from the web server to the stored email address of the user name account. The user U must then
10 re-login at step S132 and enter the received information

At step S150 the user U enters their password and then the processor 26 at step 152 determines whether these details correctly correspond to those stored in the user identification database 32. If they do not correspond the user is returned to step S142
15 and if they do correspond the user is successfully logged in at step S154.

In an alternative embodiment the user U may bypass the login page by typing their username and/or password as part of the url address when accessing the invention via their browser.
20

Preferably for security reasons only one user U can be logged in on any one given user name at one time. Consequently whilst the user U is logged under their user name it is not possible to login with a different browser under the same user name, whether on the same PC or on a different PC. This is achieved by using a database flag indicating that a
25 users user name is to be locked whilst being used. This feature stops the possibility of one person creating data in order to publish for viewing as a group rather than individuals at the same time by a multi access login.

In order for the user name account to be unlocked the user must first exit or close the web site 38 in which they are logged in at by either selecting log out or close links, from
30 within the first frame 102. If a user was unable to exit the site in this correct manner an unlock code must be entered via an on line request. An unlock code can be requested

by the user to an email address on presentation of their user password. This unlock code can then be used to unlock their account. Preferably a new unlock code is needed each time this locking occurs.

- 5 Dynamic menu 110 is generated using an embedded scripting language, and preferably a server-sided scripting language such as PHP, to access a relational database management system preferably relying on SQL such as MySQL to then construct a the menu 110/120 using java script and dynamic html formatting. The drop down menu 120 is dynamically created each and every time that a page is refreshed by moving the
10 data from the database and creating the menu structure according to data specific to the user stored in the user information database 34.

- The drop down menu 120 may also contain search engine links under the a heading of Main with these search engine links also being based upon the users configured choices
15 stored in the user information database 34.

- The dynamic menu 110 in the configuration shown in Figure 2 may consist of two major headings one called "Main" that contains the users preferred search engines and another called "skins" which is used to change the first formatted area 112 as described
20 below. The dynamic menu 110 also has further menu headings typically four which may be dynamically named along with further optional sub-directories which have the facility to be dynamically re-named.

- In a different embodiment there is also facility for displaying the directory structure and stored links down the left hand side of the screen in a textural format. In this format
25 there is no restriction on the number of main menu headings but it is typically restricted to four on the drop down menu. This side menu can be accessed for example using active X controls with java script PHP and a suitable relational database management system such as MySQL.

- 30 Within the dynamic menu 110 structure the user may create as many website names as they wish, each physical address having a linked name for display purposes with the

menu 110. The menu links may be created and altered via a set up pages 157 accessed by the main menu as displayed in Figure 6.

5 In Figure 6 it can be seen that the set up pages 157 comprise four tabs 158, 160, 162 & 164 corresponding to the headings that are displayed as the dynamic menu 110. In Figure 6 tab 162 has been selected and it can be seen from the page with the first tab 162 selected that the drop down menu 120 corresponding to the heading of the tab 162 presently contains two links 166 and 168. Each of the links 166 has a name 170 which will be displayed to the user in the drop down menu 120 and the correct URL address 10 172 which will be used by the system 100 to link to that page. it is possible to either up date or delete these links 166 and 168 using buttons 174 and 176.

Also provided at the create new link section 178 is the capacity to create a new link simply by entering a relevant name 170 and URL 172 and pressing the create button 15 180.

Web pages displayed by selection of tabs 158, 160 or 164 are in effect identical to the page for tab 162 except that they may have a different selection and number of links. By using the headed named tabs a user U is able to effectively group relevant links 20 together in a way preferred by themselves.

The process of adding, deleting, updating or moving links is shown in Figure 7. At step S182 the user selects the set up option from the user menu 110 and a set up page 157 is displayed which by default will have the first tab 158 selected at step S184. However, 25 at step S186 the user is able to select any of the other tabs 160, 162 or 164. The user U may also press the finish button 181 to terminate the process at step 188.

Once the correct tab has been selected the user U has the option of creating a new link at step S190, modifying an existing link at step S192, deleting the existing link at step 30 S194, importing links from their memory of their PC at step S196 and moving an existing link at step S198.

At step S190 the user U enters the relevant name 170 and url 172 in the create new links section 178. url may be entered as domain.tld www.domain.tld or http://www.domain.tld and all three will be displayed as http://www.domain.tld however if http://domain.tld is entered it is determined that the www is not required and
 5 the url is stored as typed.

At step S192 an existing link is modified simply by changing the name 170 or 172 and pressing the update 174 button whilst at step S194 an existing link can be deleted simply by pressing the delete button 176. At step S198 an existing link to a different
 10 heading can be moved by pressing the move button 177 and entering which tab the user wishes the link to be moved to using page 179 shown in Figure 14.

The facility to import links from the user's PC at step S196 depends on whether this is relatively supported by the users browser. Such facility is currently supported by
 15 internet explorer and can be selected by pressing button 179. This facility uploads those favoured stored in the users own browsers memory to the web browser and incorporates these links within the dynamic menu 110.

Once steps S190, S192 and S194 are completed the user is free to either add, modify,
 20 delete, import or move another link from this tab at S200 or to return to step S186. Once step S198 is completed the user must enter the relevant directory by a pop up screen that appears at step S202 before they return to step S165.

Once the selections have finished at step S18, the changes made by the user U are
 25 implemented by altering the relevant information stored in the user information database 34 (MySQL). Consequently the dynamic menu 110 created by the scripting language (such as PHP) will access altered information and display altered dynamic html. For example if the user U has added a link then the stored name of this new link will be displayed in the drop down menu 120 when the relevant heading is selected.

30

The process of importing links from the user PC memory 36 is shown in more detail in Figure 8. At step S196 the user selects the import favoured link and then at step S206 a

new page is displayed. At step S208 a pop up window 210 as shown in Figure 9 is then displayed to the user from which the file urlgen.bat must be downloaded.

The user U selects a favourites directory on their PC memory 36 such as a hard disc drive at step S212 into which they save the file urlgen.bat At step 214 the user then
 5 selects OK if he/she wishes to continue. At step S216 the process then determines if the download has been successful, if it has not been the process turns to step S206 and if it has then the process continues to step S218.

10 Next the user must access the directory in which the urlgen.bat file is saved and run this file (such as by double clicking) at step S220. When activated the urlgen.bat file will create a new file urllist.txt within the same directory on the PC 20, 22 or 24.

At step S224 the user then selects the upload link 223 on page 210 and selects the file
 15 URLlist.txt at step 226 by browsing their PC directory. The submit button 225 is then selected at step S228 and the urllist.txt file is uploaded to the web server 12. At step S230 the processor 26 determines whether the file has been successfully uploaded to the user information database 3, and if it has not been the process returns to step S224 and if it has been the process continues

20

At step S232 the user U is presented with a list of the urls of each of the links they have requested as depicted in Figure 10.

Next at step S234 the user U is displayed the web page 227 and creates logical names
 25 in the text box 229 for each link that the user wishes to import into the dynamic menu 110. Then at step S236 the user and selects which of the tabs 158 - 164 the user U wishes the relevant link to be displayed in by clicking on the relevant circle in the "store menu number" section 231.

30 At step S238 the user U may also decide not to upload one or more links into the dynamic menu 110 by selecting a "none" circle 233 . The user then presses the submit 225 button at step S240 and at step S242 the links area are imported into the dynamic

menu 110 and the user is returned to the set up page 157 which now displays the imported links alongside the existing links as shown in Figure 12. Alternatively at step S224 the user may select cancel from which no links are imported into the dynamic menu 110.

5 Imported links are not fixed under the tab they were imported to and can be moved in an identical manner to existing links by selecting the move button 177 shown close up in Figure 13.

10 A client using a client PC 16 or 18 may create a background intended to form the first formatted area 112 herein referred to as a "skin". In order to submit a skin for use by user U the client must step up an account with the administrators of the web server 12 and preferably agree to abide by its terms and conditions.

15 In Figure 15 is shown the access page 250 forming part of the client web pages 46 and 48 for the client to log in to the system. This page 250 requests the client C to enter an account number, client name and password at 252, 254 and 256 respectively and to submit these by pressing the submit button 258. If these details are correct and correspond correctly to the corresponding information stored in the client identification
20 database 27 the client will be shown the web page 260 displayed in Figure 16. In an alternative embodiment the client has sub accounts of the client account and the skins reside within these sub accounts.

On Page 260 the client C is presented with three options, the create new Skin option
25 262, the list/update skin option 264 and the view statement of account option 266.

If the create new skin option 262 is selected the client is presented with a client page 268 comprising five tabs 270, 272, 274, 276 and 278 which is displayed in Figure 17 with the first tab, the create skin tab 270 selected. With this tab 270 selected the client
30 is able to choose a category to select a name and a circulation limit and skin expiry time and a price per week for their created Skin. In an alternative embodiment the client may also specify that the skin is to be location specific so that if the country of residence of a

user U, which can be provided by the user U on registration or determined from the user's IP address, is not a country specified by the client then the user U will not be able to access that skin. A client may also specify that the skin is gender or age specific and similarly only those users with the relevant specified date of birth or gender registered will be able to access those skins.

A created Skin is also automatically allocated a unique skin number 280 from which it can later be identified. Page 268 also provides the option of allowing critical feedback so that a user U can send a message back to the client C commenting on their Skin if they have loaded it into their first formatted area 112.

Page 268 is shown in Figure 19 with the second tab, the upload images tab 272 selected. With the second tab selected the user is able to up load stored images as the new skin. Each Skin comprises three files, a background file designed to fit the second formatted area 118 when no web site is selected or if the selected web site is displayed in a separate window, a html file to use for the first formatted area 112, and a html file to be displayed in left hand portion 114. The latter one of these files must of course be of variable length to allow it to be displayed in the configuration shown in both Figure 2 and Figure 3 while the second formatted area 118 will commonly be a simple photograph attached as a Jpeg file.

The client may also specify a number of web links, such as 3, to appear at the bottom of the users Main menu when the skin is loaded.

The Jpeg file corresponding to the second formatted 118 is selected and uploaded under this upload images tab 272 displayed in Figure 19 whilst the html file for the first formatted area 112 is selected and uploaded by the third tab, the menu html tab 274 displayed in Figure 20 and the html corresponding to left hand portion 114 is selected an upgraded by the fourth tab, the main html tab 276 as shown in Figure 21. The user may then select the fifth tab, the preview tab 278 as shown in Figure 22 which displays a preview of the uploaded images as they will be viewed by a user U.

Instead of uploading the images the skins may also be accessed by the skins databases 28 and 30 by the client uploading url addresses for where the HTML and graphic tables reside. This allows the client to update the content by changing the file on the client PC 16 or 18 and the skin consists of url addresses that retrieve the data from the client PC 16 or 18 via the user Us browser bandwidth.

Once finished the client C may send these complete three files to the web browser 12 which are then stored by the processor 26 in the live skins database 28. The operator of the web browser 12 can then view the skins stored in the pending skins database 28 and consequently approve or not approve the submitted skin. Once approved by the operator via operator web pages 50 the approved skin is entered into the live skins database 30. The client C may come back to these pages at 268 at anytime to make further changes to the skin format stored in the pending skins database 28 but each time they do so the skin must be approved by the operator before it enters the live skin database 30 .

In Figure 23 is shown page 284 which forms part of the operators pages 50 and is preferably only viewable by the operator PC 14 or possibly the operator using a required password form any PC. On Page 284 an operator of the web server 12 is able to view the submitted skin and either approve the skin in which case it will enter the live skins database 30 and then become selectable by user U or to disapprove and send relevant comments back to the client C via communication channel 52 such that they may alter their Skin in order to comply with the requirements of the operator.

In a alternative embodiment the skins need not be approved by an operator viewing the operator web pages 50 and sent directly to the live skins database 30 by the client.

In Figure 24 is shown the update page 290 forming part of client pages 38 which is presented to a user U when they wish to change, alter or select the skin. In Figure 24 the first tab 292 is shown selected which allows the user to manage their skins. As can be seen the current selected Skin which will be displayed in the present formatted areas is displayed showing its Skin number 280, Skin name, expiry date and the cost of

extending this expiry date. Also shown are any other Skins which the user has previously selected and the user U may change the selection to one of these stored skins 294.

- 5 The second tab 296 can then selected as shown in Figure 25. Tab 296 allows a user to purchase new skins. The user U can view skins stored in the live skins database by categories which have been entered for each skin. Once purchased the skin will be added to the list 294 displayed under the first tab 290. In the case of location, gender or age specified skins the user U can only view those skins which his or her registered details permit.

10 In another embodiment the skins in the live skins database 30 are presented to the user U in the form of a list, each skin being represented by one or more words numbers or symbols. Each representation is accompanied by a preview link which allows the user U to see the background image of the skin.

20 The third tab 298 allows user is to change their personal details and password information stored in the user information database 34 and this tab is shown selected in Figure 26.

The fourth tab 300 is shown selected in Figure 27, this fourth tab 300 allows a user to select which search engine they would like stored in the user information database 34 and accessible to them in web pages 38.

25 The fifth tab 302 is shown selected in Figure 28, this fifth tab 302 allows a user to send feedback to the client C via communication channel 44. As can be seen from Figure 28 this feedback can take the form of a message and suggestion details and can be sent both to the client and to the operator of the web server 12.

30 When the expiry period of a skin runs out it can now longer be displayed in user web pages 38 and is removed form the live skins database 30. Should a skin have a price

above zero and this price not be paid by a user the skin will remain in the live skins database 30 but will be blocked form use by the non-paying user U.

5 In an alternative embodiment the invention can be implemented as a downloadable browser or as a browser plug-in which reconfigures the browser in the user PC 20 so that it the links stored for that user U in the user information database 34 are inserted into the favourites of the browser and the selected skin is displayed on screen.

10 There may also be provided a web page that lists all the directory structure and web links contained within the users menu, via this page each url link name will open the link website in an external new browser window.

Claims

1. A web server comprising a memory and an information processor, the memory including a stored web page viewable by a remote user, wherein the stored web page is alterable by the remote user in at least one of appearance and function.
2. A web server according to claim 1 in which the memory contains addresses such as urls (uniform resource locators) addresses, useable by a remote user to locate and view web sites not stored in the memory.
3. A web server according to claim 2 wherein the address urls can be deleted by a remote user and/or additional address urls created by a remote user can be stored in the memory and/or the address urls can be edited by a remote user.
4. A web server according to claim 2 or 3 wherein the stored web pages comprise links to other web pages corresponding to the stored address urls.
5. A web server according to claims 3 and 4 wherein when an address url is edited, created or deleted a corresponding alteration is made to the link on the stored web page.
6. A web server according to claim 4 or 5 wherein if a link is activated by a remote user the web site accessed which is not stored in the memory is opened as a frame within a stored web page.
7. A web server according to claim 4, 5 or 6 wherein the address urls are categorised in the memory and the links to other web pages displayed on a stored web page and viewable by a remote user correspond to the address urls of a category selected by the remote user.
8. A web server according to any of claims 2 to 7 in which address urls can be downloaded into the memory from address urls stored in the memory of a computer of a remote user.

9. A web server according to any preceding claim wherein the stored web page comprises an embedded language which accesses other information stored in the memory and the web page is viewable by a remote user in a first configuration displaying a first *set* of accessed information and a second configuration displaying a second *set* of accessed information the configuration viewed by the remote user depending on an action taken by the remote user, wherein either the first set or second set of information and preferably both can be altered by the remote user the altered information stored in the memory.

10

10. A web server according to claim 9 when dependent on claim 2 in which the second set of information comprises links to other web sites corresponding to the stored address urls.

15

11. A web server according to claims 10 and 7 in which the second set of information comprises links to other web sites corresponding to the address urls of a category selected by the remote user.

20

12. A web server according to claim 11 in which the first set of information contains areas for categories of address url and there is a configuration for each area displaying a set of information comprising links to other web sites corresponding to the address urls of the category of that area.

25

13. A web server according to claim 12 in which the web site changes form being viewed in the first configuration to a configuration of a category by a remote user selecting, such as by pointing a cursor, the relevant area.

30

14. A web server according to any preceding claim wherein the stored web page comprises a formatted area consisting of a set of data viewable by a remote user wherein the data can be selected by the remote user from a series of sets of data stored in the memory.

15. A web server according to claim 14 wherein a set of data stored can be created and submitted to the memory from a remote computer.
- 5 16. A web server according to claim in which the submitted set of data can be reviewed by a second remote computer before that set of data becomes selectable by remote users.
- 10 17. A web server according to any of claims 14 to 16 in which a stored set of data has an expiry date, so that when the expiry date is passed the set of data can no longer be selected by remote users.
18. A web server according to any of claims 14 to 17 which can request payment from a remote user when a set of data is selected.
- 15 19. A web server according to any of claims 14 to 18 when dependent on claim 6 in which the formatted area occupies the frame in which selected web sites can be displayed.
- 20 20. A web server according to any of claims 14 to 18 when dependent on claim 6 in which the formatted area is separate from the frame in which selected web sites can be displayed such that the selected set of data is displayed alongside the selected web page.
- 25 21. A web server according to any preceding claim comprising identification means for identifying remote users and wherein a stored web page is viewable to an identified user and alterations to that stored web page, including any alterations to urls corresponding to links on the web page or to change in selection of the set of data to be displayed in the formatted area, are stored in the memory tagged to that identified user and a second differently identified user can not view information and web pages tagged to the first identified user.
- 30

22. A web server according to claim 21 wherein the identification means identifies remote users by requesting information such as a password and checking this information against information stored in the memory and displaying web pages to the user once identified that are tagged to the requested information such as a password.

ABSTRACT

- 5 A web server comprising a memory and an information processor, the memory including a stored web page viewable by a remote user, wherein the stored web page is alterable by the remote user in at least one of appearance and function.

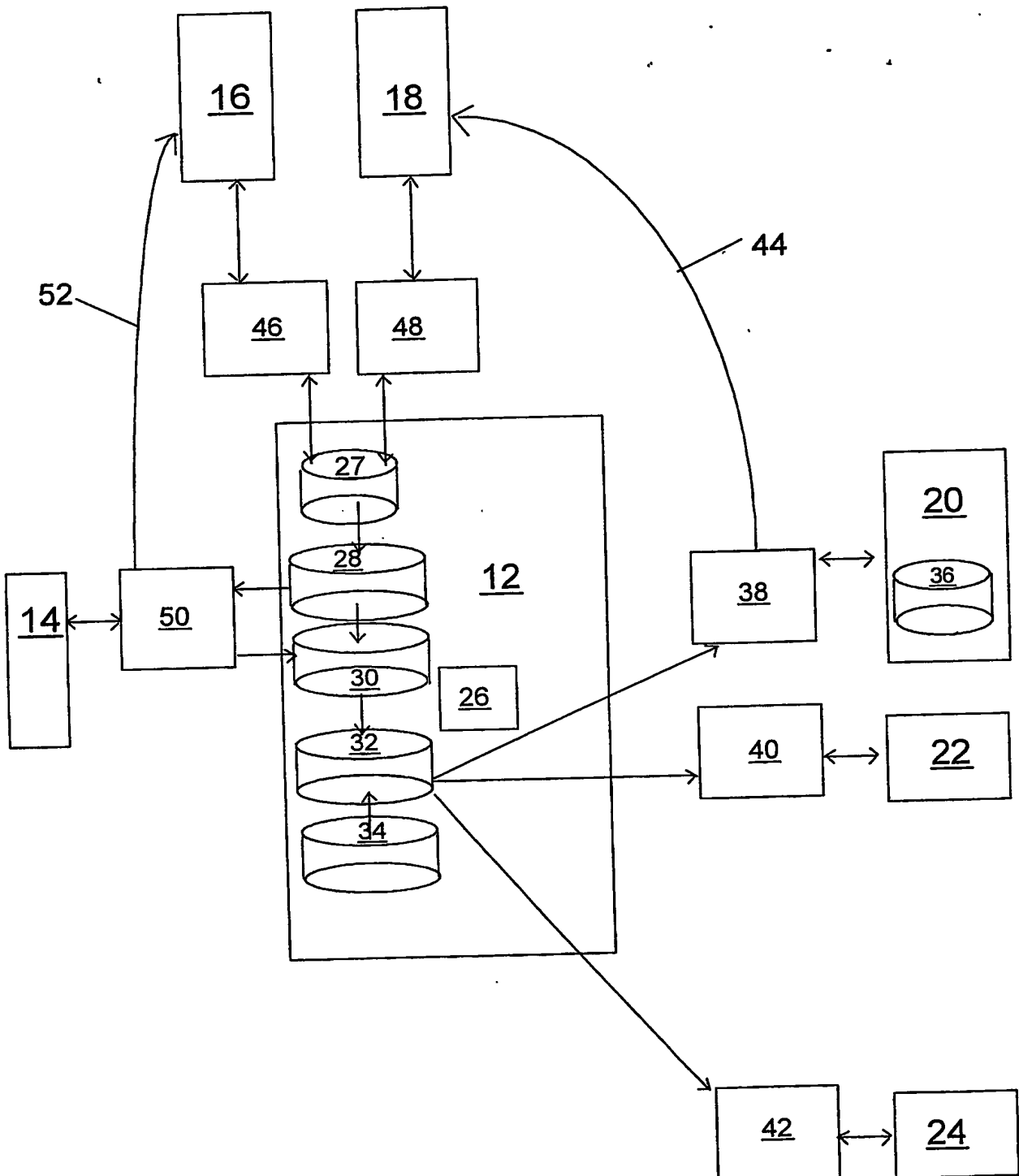
Figure 1

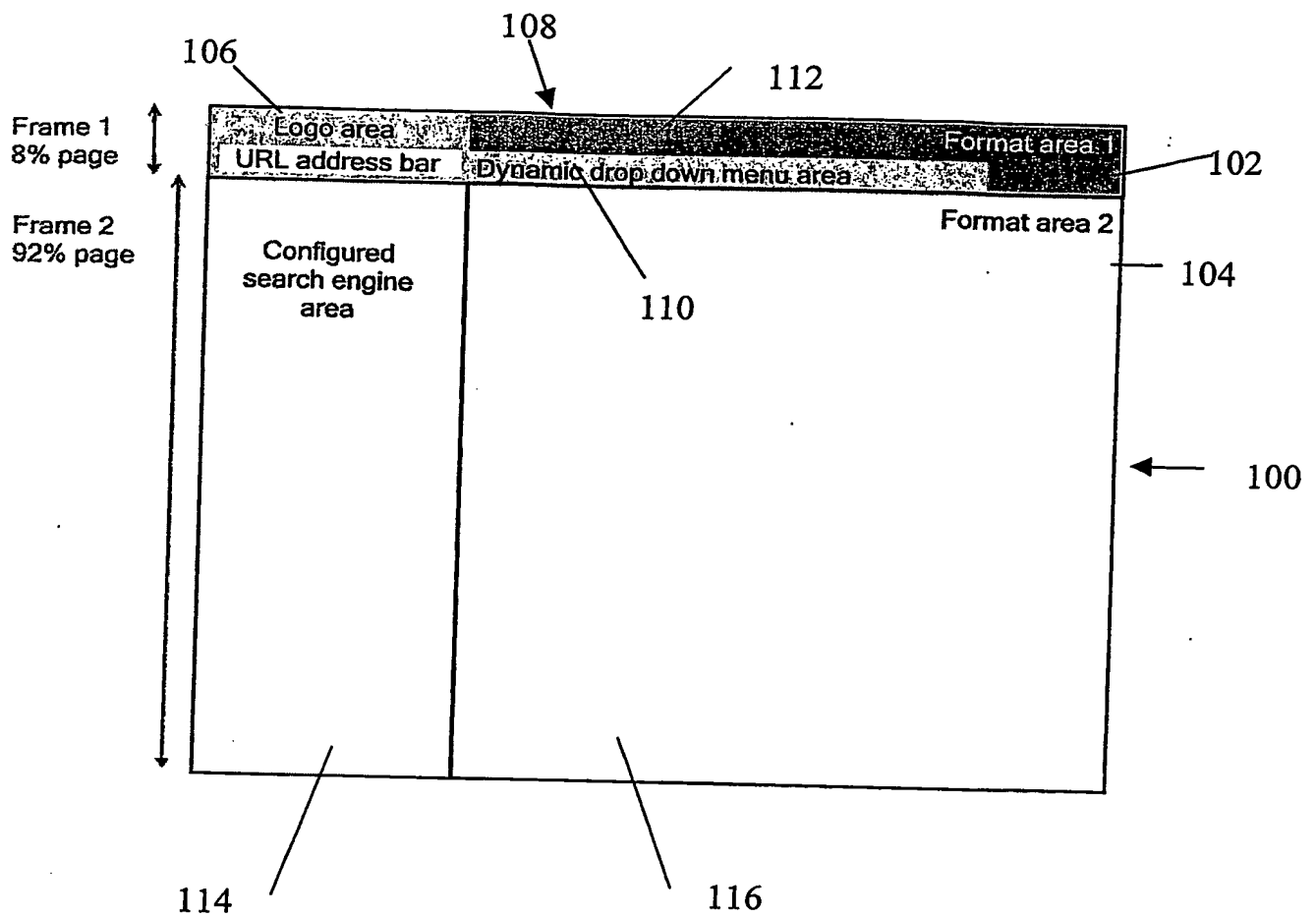
Figure 2

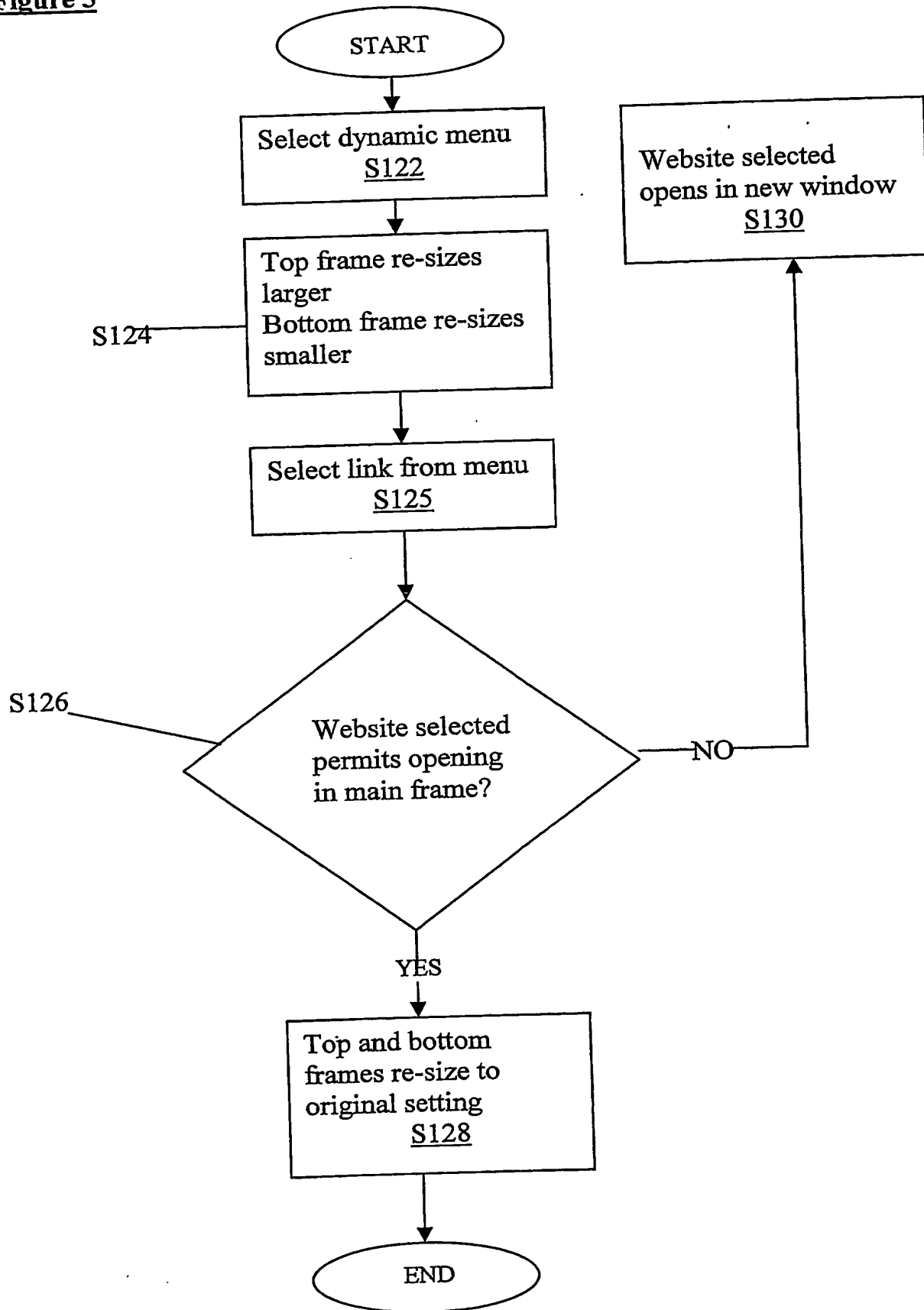
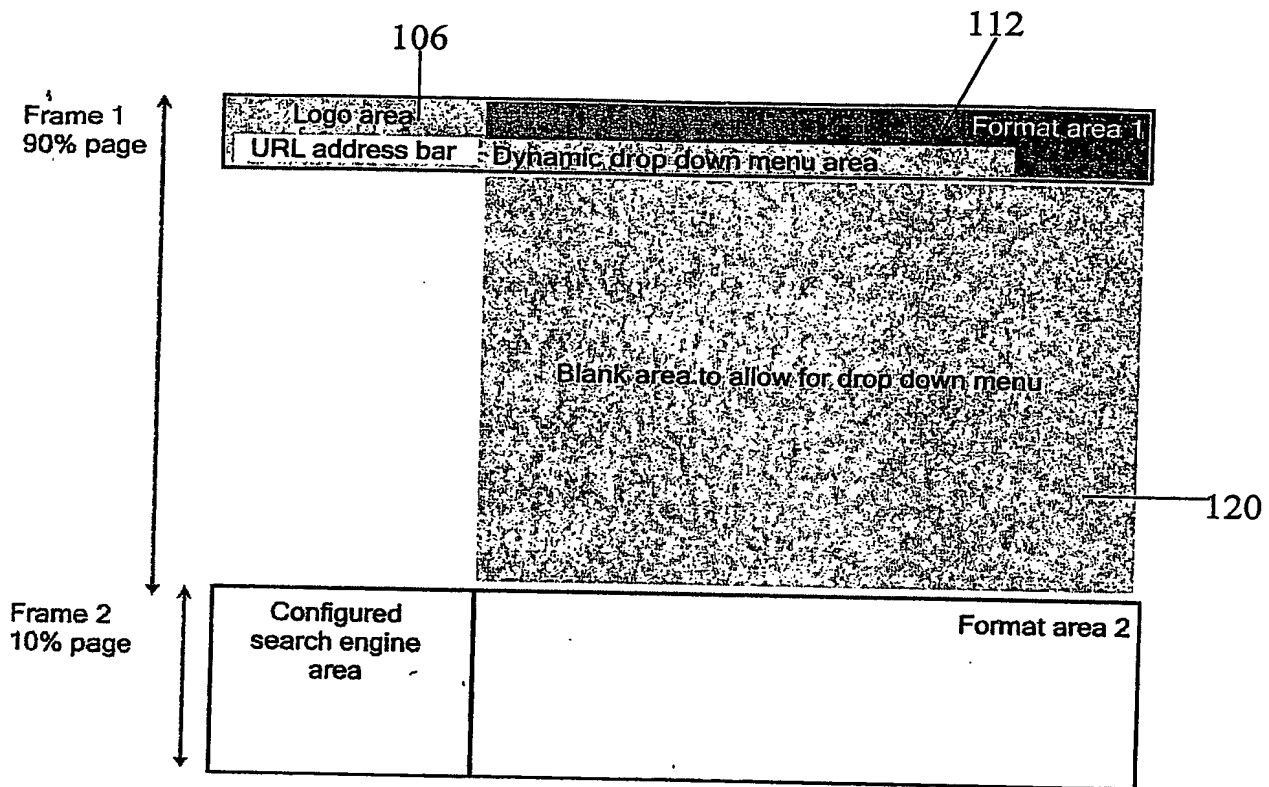
Figure 3

Figure 4

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Figure 5

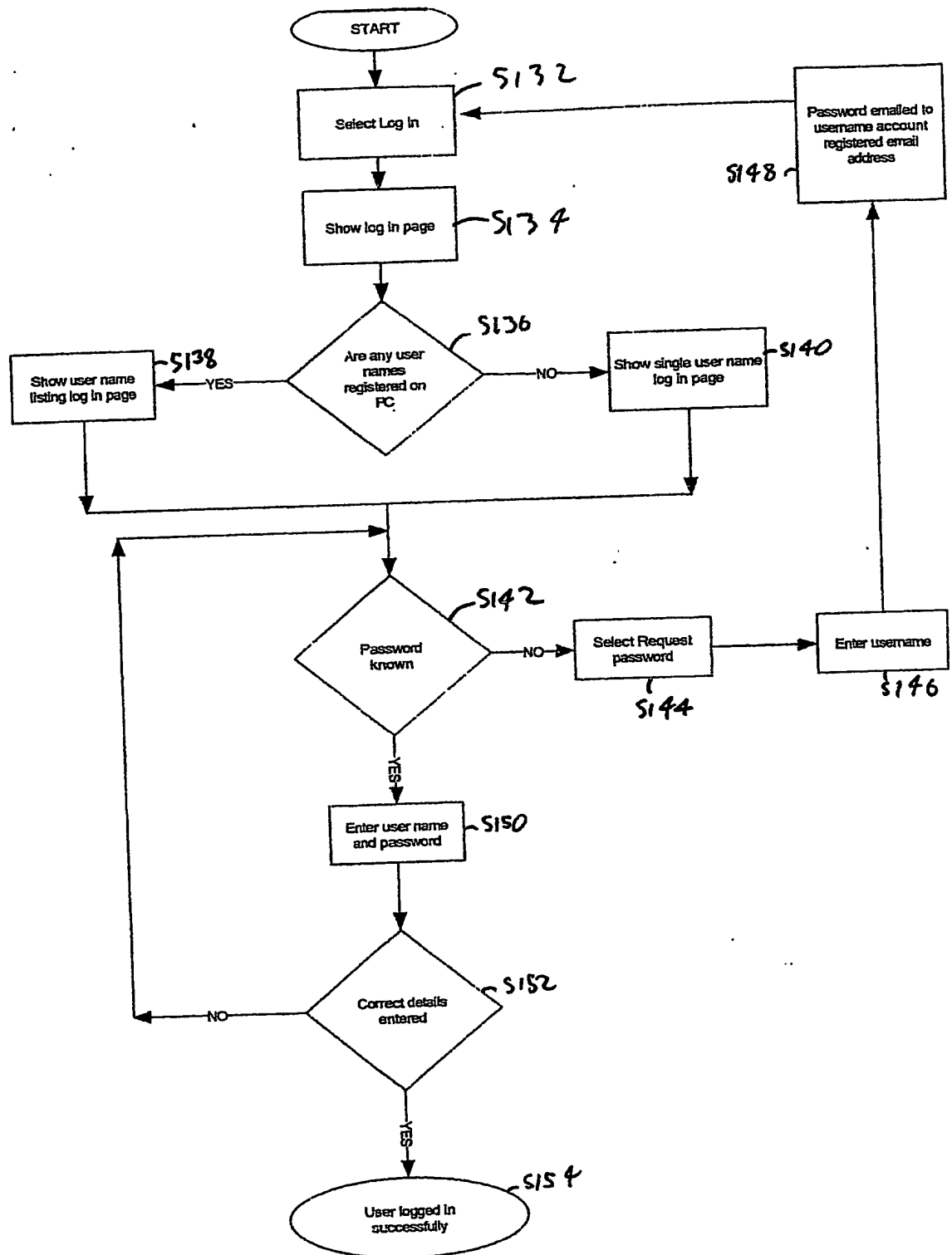


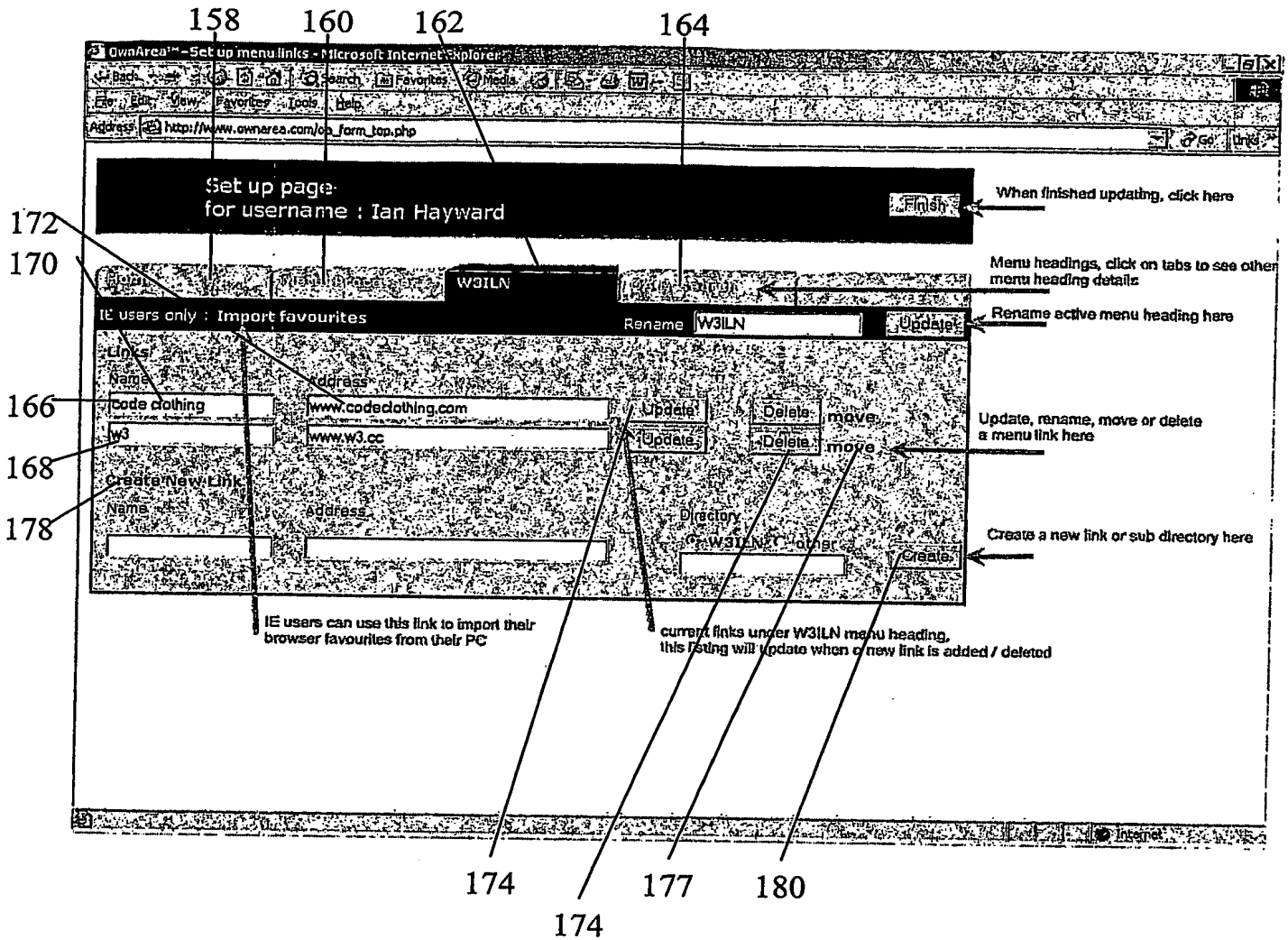
Figure 6

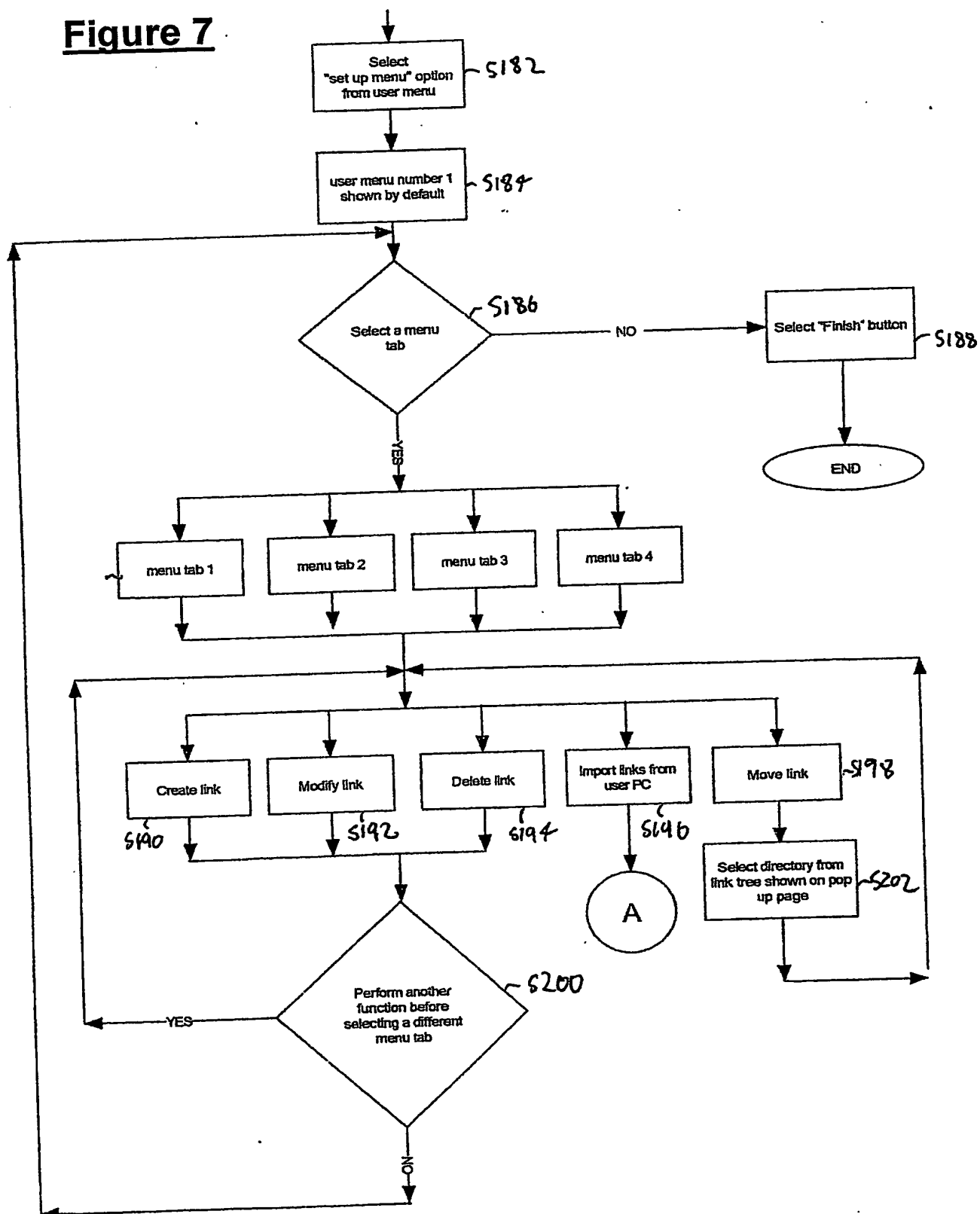
Figure 7

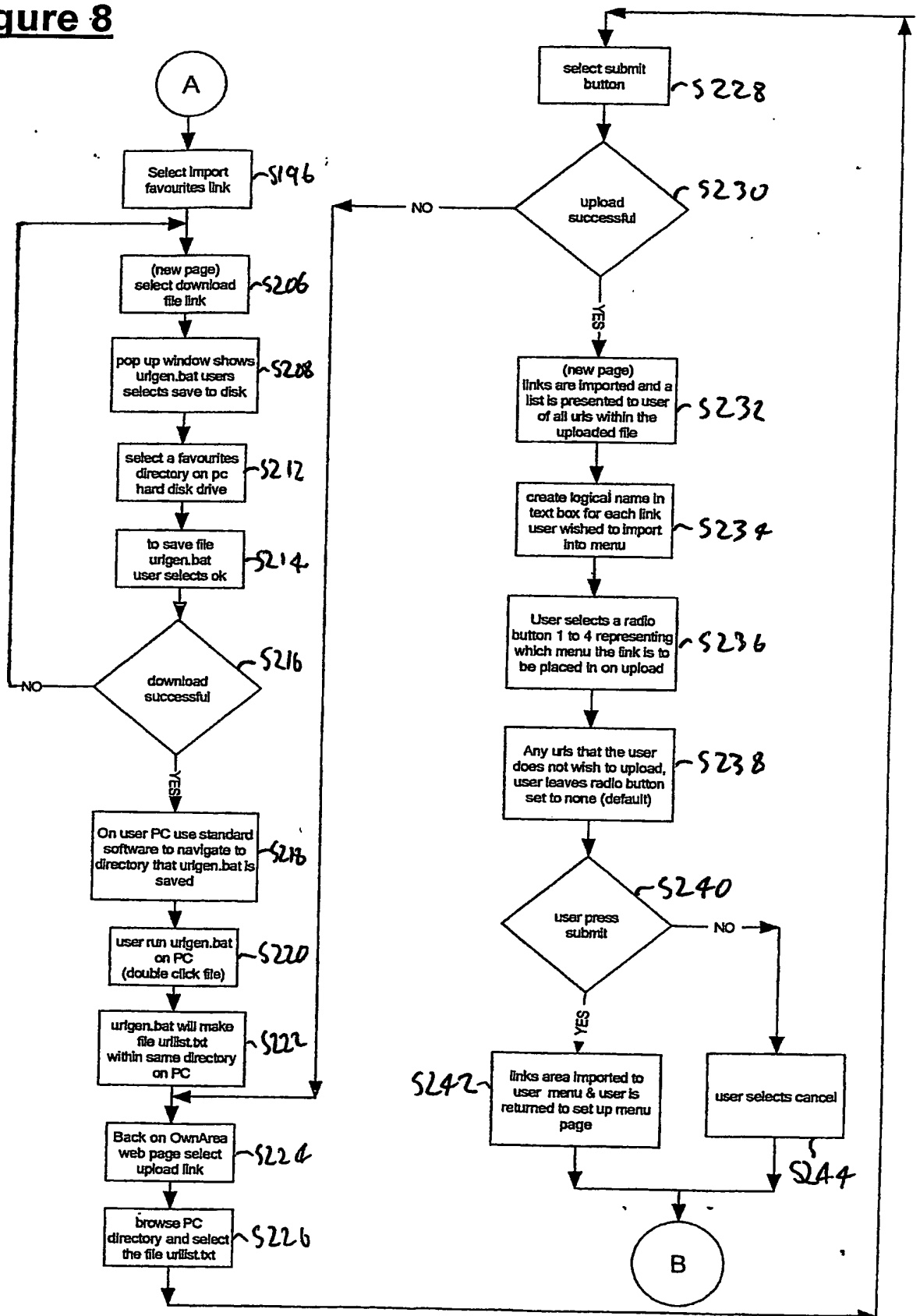
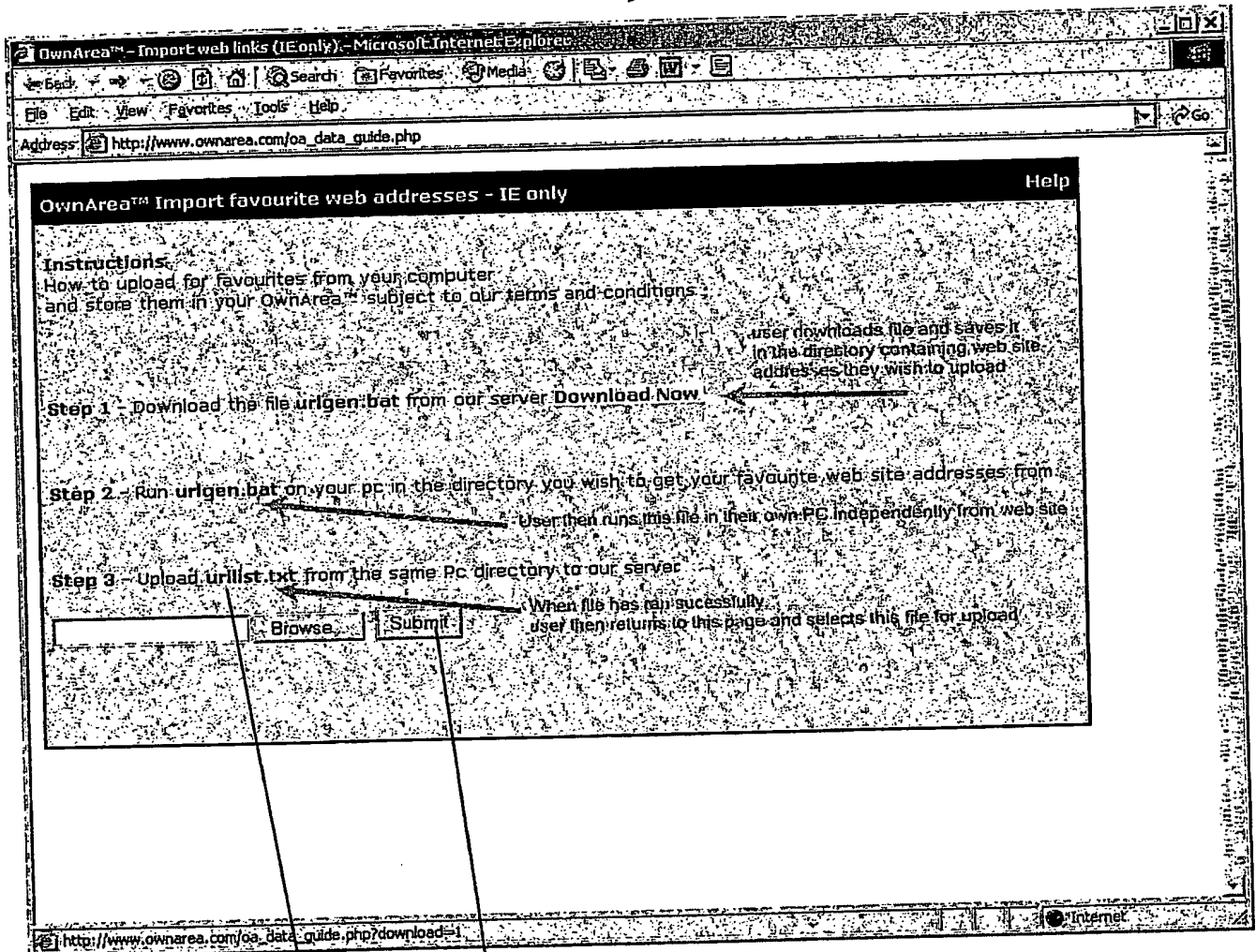
Figure 8

Figure 9

210



223

225

Figure 10

```

AULT]
URL=http://www.netsol.com/en_US/index.html;sessionId=12LESIU20JHGTWFI3EFCFEQ?requestid=1096291
#660]
URL=http://ad.doubleclick.net/ad/networksolutions.com/sponsor-button/yahoo;sz=135x40;ord=89002239
URL=http://ad.doubleclick.net/ad/networksolutions.com/sponsor-button/yahoo;sz=135x40;ord=89002239
metShortcut]
http://www.netsol.com/en_US/index.html;sessionId=12LESIU20JHGTWFI3EFCFEQ?requestid=1096291
fed=B0A2E9A347ABC10192
file=http://www.netsol.com/favicon.ico
index=1
AULT]
URL=http://www.icann.org/
metShortcut]
http://www.icann.org/
fed=D01B53BEA850C101B6
AULT]
URL=http://www.interimic.net/
metShortcut]
http://www.interimic.net/
fed=90692BD3A850C101B1
AULT]
URL=http://www.nic.biz/
metShortcut]
http://www.nic.biz/
fed=60BEBE24A950C101B8
https://www.realnames.com/body/reg_checkavail.asp
fed=90557EA8FCECC101B5
AULT]
URL=http://bulkregister.com/home.html
metShortcut]
http://bulkregister.com/home.html

```

Figure 11

227

The screenshot shows a web browser window titled "OwnArea™ - Import web links - Microsoft Internet Explorer". The address bar shows "http://www.ownarea.com/oa_data_input.php". The page content is titled "OwnArea™ Data import facility - Import Favourites (IE only)".

Imported web links

Enter link name	Imported web address	Store in menu number
		1 2 3 4 none
Network Solutions	http://www.netsol.com/en_US/index.html?sessionid	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
ICANN	http://www.icann.org/	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
InterNIC	http://www.internic.net/	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
	http://www.nic.name/	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
	http://www.enic.cc/	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
	https://www.realnames.com/body/reg_checkavail.asp	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
Bulk register	http://bulkregister.com/newld.phtml	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

To upload links, click here: to confirm that you agree to our terms and conditions

229 points to the "Enter link name" column.

231 points to the "Continue" button.

233 points to the "Cancel" button.

Annotations:

- User selects the menu number under which to store the imported link
- If user does not wish to upload a link then the default selection is left set to none and this link will be ignored on upload
- When user is happy with selection they click continue. The links are imported and they are returned to the page as in figure 3
- User must type in a link name that is to be displayed in the drop down menu

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Figure 12

OwnArea™ - Set up menu links - Microsoft Internet Explorer

Back Forward Stop Search Favorites Media

File Edit View Favorites Tools Help

Address: http://www.ownarea.com/oa_form_top.php

Go Links

Set up page
for username : Ian Hayward

Finish

HOME

My OwnArea

W3ILN

My Personal

IE users only : Import favourites

Rename W3ILN

Update

Links

Name	Address	Update	Delete	move
code clothing	www.codeclothing.com	Update	Delete	move
w3	www.w3.cc	Update	Delete	move
Network Solutions	www.netsol.com	Update	Delete	move
ICANN	www.icann.org	Update	Delete	move
InterNIC	www.internic.net	Update	Delete	move
Bulk register	bulkregister.com/newtld.phtm	Update	Delete	move

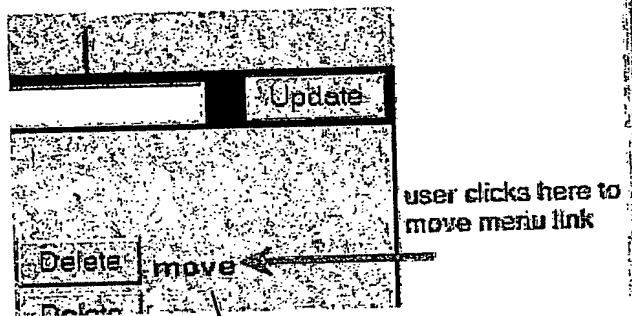
Create New Link

Name	Address	Directory
		W3ILN Other

Create

New links

Figure 13



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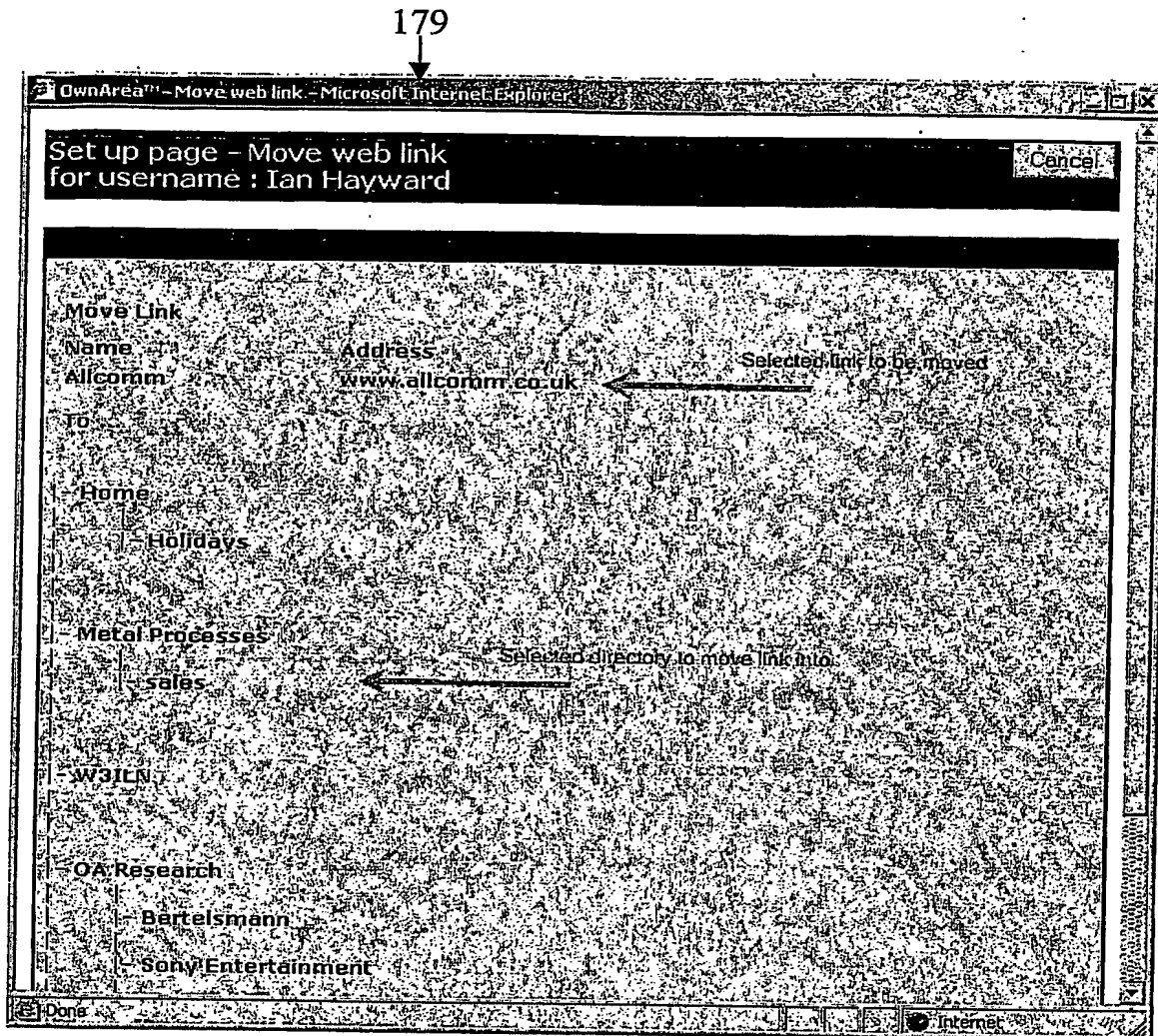
Figure 14

Figure 15

250

OwnArea™ - Client log in - Microsoft Internet Explorer

Back Forward Stop Home Search Favorites Media

File Edit View Favorites Tools Help

Address: http://www.ownarea.com/oa_client_login.php Go

OwnArea™

Client Login

Account number

Client name

Password

Forgotten details?
click here

Submit

Cancel

3 stage security required
Account number
username
and password

Internet

252

254

256

258

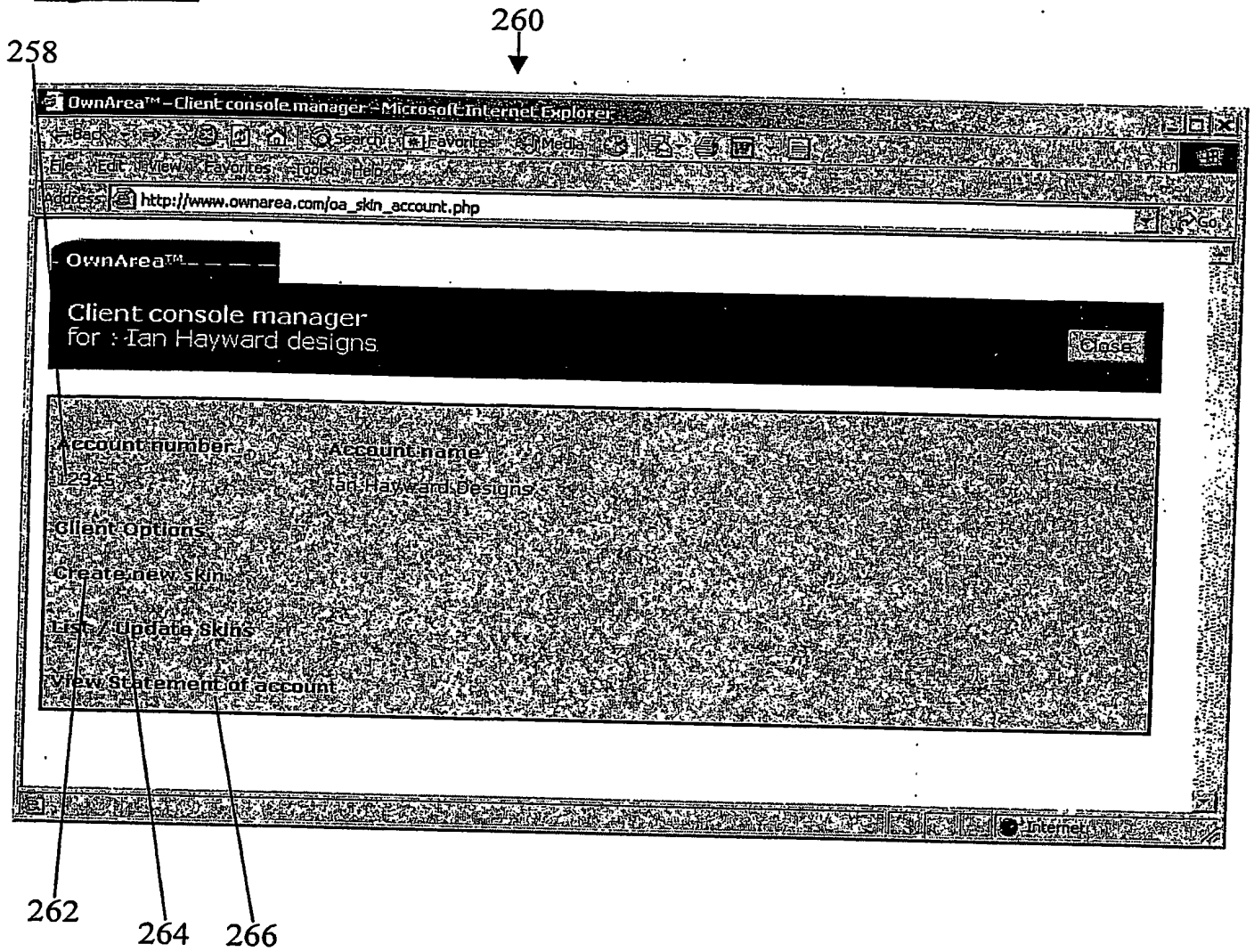
Figure 16

Figure 17

OwnArea™ Client area - Create skin - Microsoft Internet Explorer

Address: http://www.ownarea.com/oa_skin_account_create_skin.php?number=1

OwnArea™
Client area for (account number 12345)

1 : Create Skin

Create Skin
please follow the numbered steps above

Step 1: Create skin details

Skin Number 5441365	Category Music Artist	Name 	Circulation Limit
Skin expiry time weeks	Price £ per week	Include Feedback facility Yes	Create

When satisfied with details the client clicks create, and the skin details are stored in the database for them

This button then changes to "update" because details can then be changed if necessary

If set to yes, a user can send a message back to the client when they have their skin loaded into their OwnArea

Unique skin number is generated automatically

Client has full control over skin details including:
Category
Skin name
circulation limit
expiry time
& price

Cancel & return to console

270 272 274 276 278

280 268

Figure 18268
↓

OwnArea™ - Client area - Create skin - Microsoft Internet Explorer

http://www.ownarea.com/oa_skin_account_create_skin.php

OwnArea™
Client area for (account number 12345) Cancel & return to console

-1 : Create Skin — 2. Select a skin 3. Select a category 4. Select a name 5. Select a circulation limit

Create Skin
please follow the numbered steps above Finish

Step 4: Create skin details

Skin Number 6423657	Category <input type="text" value="Music Artist"/>	Name <input type="text" value="Blue Band"/>	Circulation Limit <input type="text" value="1000"/>
Skin's price 1 Weeks	Price 0.5 per week	Include Feedback facility <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="button" value="Update"/>

Figure 19

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OwnArea™ - Client area - Create skin - Microsoft Internet Explorer

Address: http://www.ownarea.com/oa_skin_account_create_skin.php?number=2&skin_name=blue%20&price=0.5&creation_limit=1000&expiry=1&feedback=Yes

OwnArea™ Client area for (account number 12345) Cancel & return to console

1: Select a skin 2: Upload Images 3: Upload HTML 4: Upload CSS 5: Preview & Finish

Create Skin please follow the numbered steps above Finish

Step 2: Upload skin images

Upload general image files for skin HTML areas (ref your directory = /img)

Browse Upload

Upload JPG image file for use as your skin menu background (must be 500px x 60px)

Browse Upload

Currently no image uploaded for menu area background

Any web images that are required by the clients HTML skin areas must be imported here.
(accept the main menu background image)

Once imported the image will be shown in a list under this section

The main menu background image must be uploaded here

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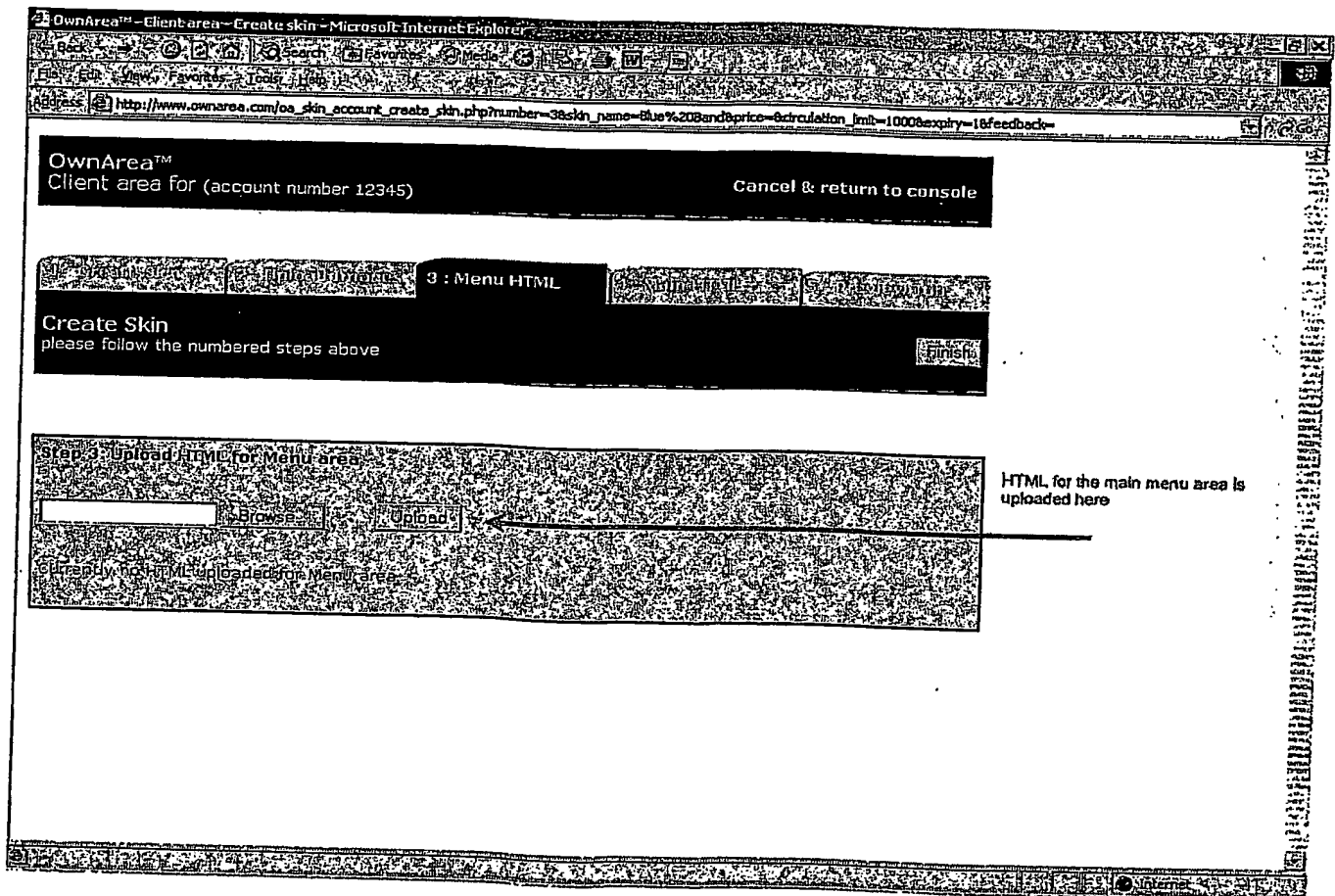
Figure 20

Figure 21

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OwnArea™ - Client area - Create skin - Microsoft Internet Explorer

Address: http://www.ownarea.com/oa_skin_account_create_skin.php?number=48&skin_name=8&price=8&circulation_limit=1000&expiry=18&feedback=

OwnArea™
Client area for (account number 12345)

Cancel & return to console

1: Main HTML 2: Upload HTML 3: Upload HTML 4: Main HTML 5: Upload HTML

Create Skin
please follow the numbered steps above

Finish

Step 4: Upload HTML for Main area

Currently no HTML uploaded for Main area

HTML for the frame 2 HTML area here

Browse Upload

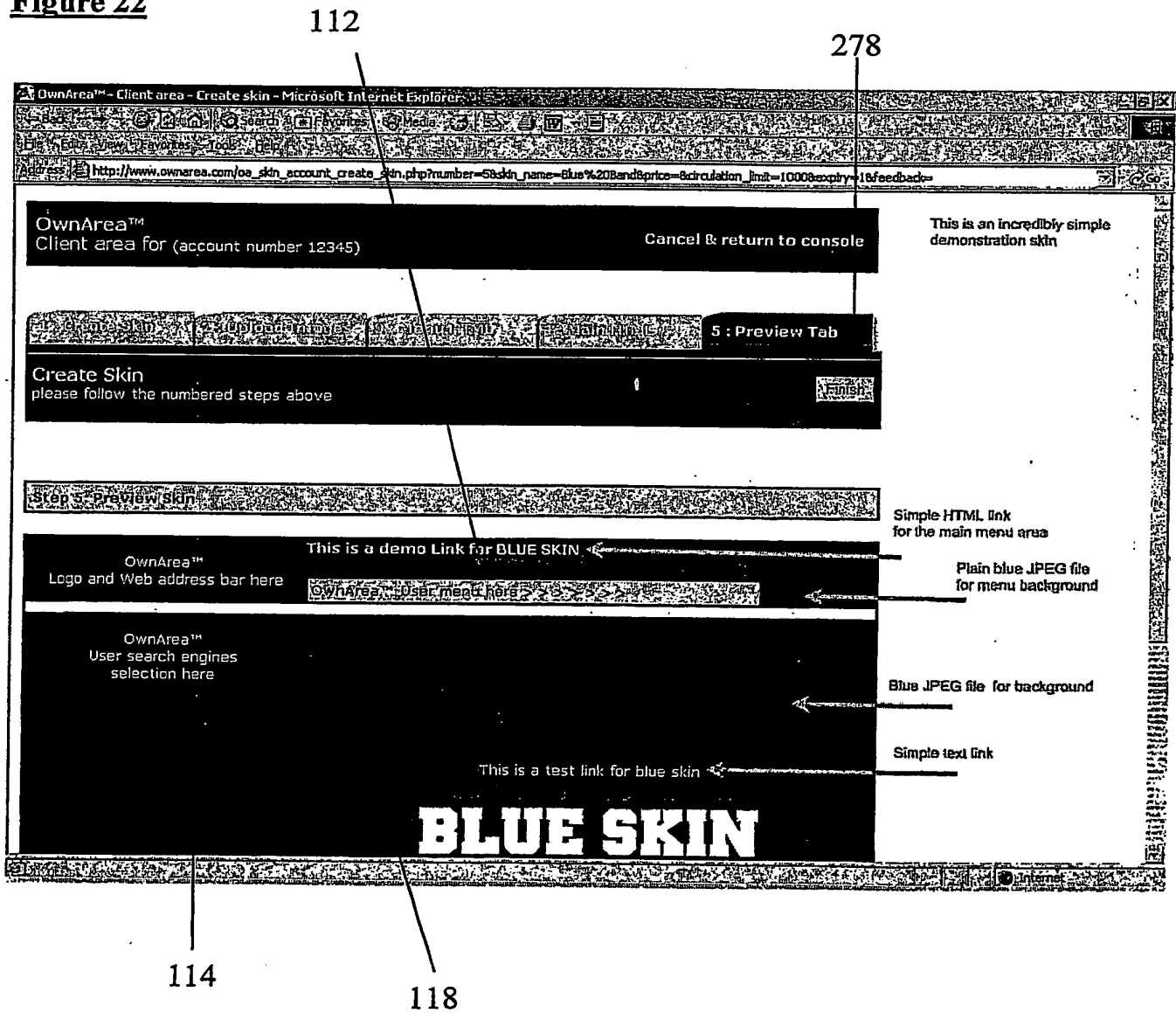
Figure 22

Figure 23

OwnArea™ - In house skin admin console - Microsoft Internet Explorer

Address: http://www.ownarea.com/oa_skin_admin.php

In house - Skin Admin Console CLOSE no update



Skin # 2784081 : Class status as **Hold** Enter return comment to client

Account name: paul booker
 Account number: 3368028

Category	Name	Circulation Limit	Current Circulation	Skin order time weeks
Organisation	Metal 1959	8000	0	

Main Site Customer Area **Metal Processes Laser Cutting** Tel: 01922 492229 Fax: 01922 492228

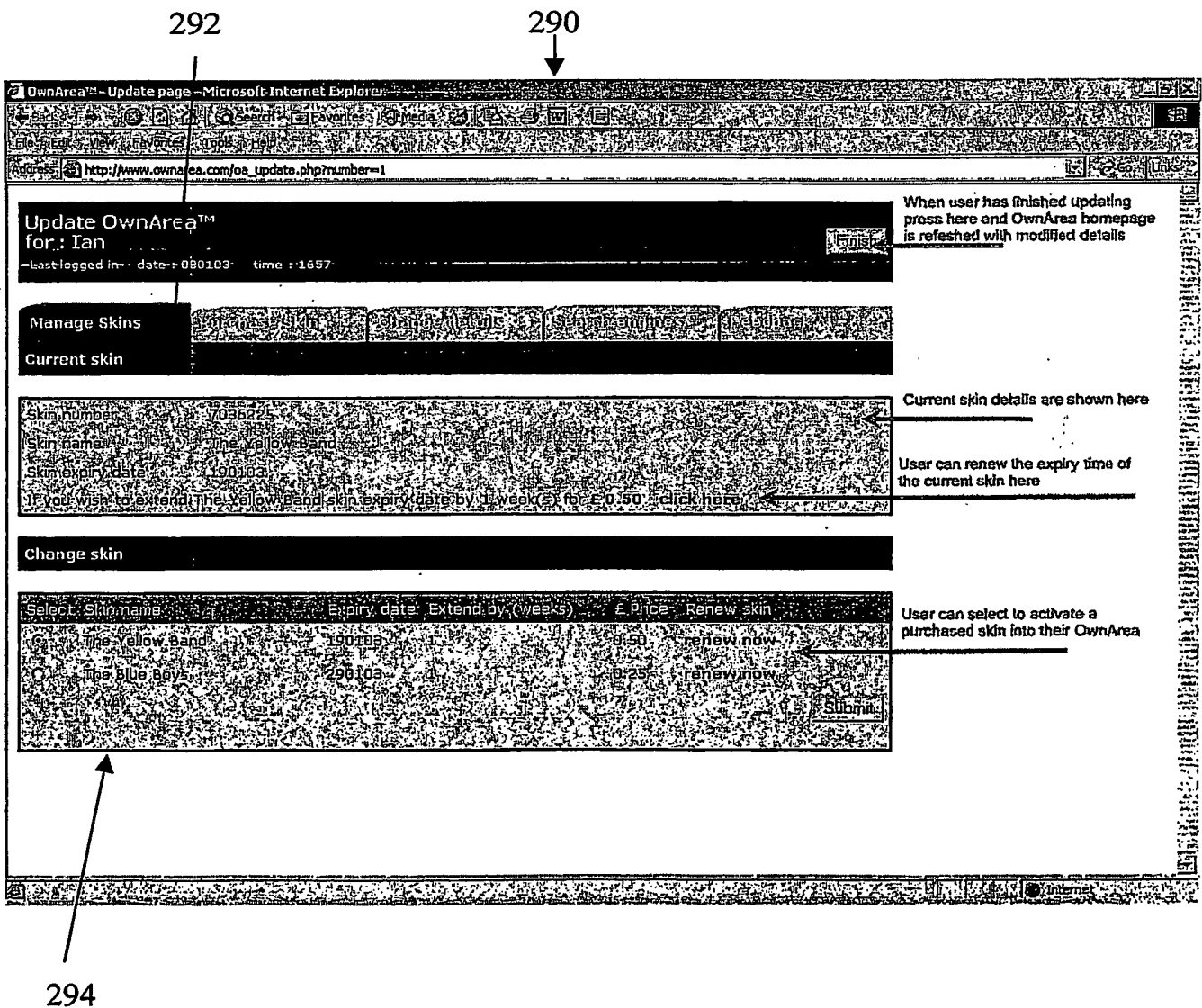
Metal Processes Laser Cutting Tel: 01922 492229 Fax: 01922 492228

<input checked="" type="checkbox"/> Capacity	 TRUST	<input checked="" type="checkbox"/> Ability	 SERVICE
--	---	---	--

If our operator types in a comment here it is auto-emailed to the client, when submit is pressed at the btm of the page (not shown)

Default setting = hold
 if this is changed to live, then when submit is pressed at btm of page, the client receives email notification and the skin is live for offering to users

Our operator is able to see that there are some images missing on the clients skin

Figure 24

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Figure 25

Update OwnArea™
for: Ian
Last logged in date: 080103 time: 1657

Purchase Skin

Purchase skin(s)

List skins by category **show ALL** [view basket](#)

#	Name	Expiry time	Price
6994502	metal processes	6 week(s)	£ 1.50
Metal Processes Laser Cutting <small>01922 492228 To 01922 492228 Fax</small>			
6606902	The Blue Boys	1 week(s)	£ 0.25
4562212	Blue 2	1 week(s)	£ 0.20

Annotations:

- User views their basket to continue purchase of skins (points to [view basket](#))
- Skins may be sorted by category (points to **show ALL**)
- User adds offered skins to their basket (points to [Add to basket](#))

Figure 26

OwnArea™ - Update page - Microsoft Internet Explorer

http://www.ownarea.com/oa_update.php?number=38&skin_name=&circulation_limit=&expiry=

Update OwnArea™
for : Ian

Last logged in date : 080103 time : 1657

Change details

Change display name

Currently Ian

Change to

Submit Change

Change display name here

Change email address - or receiving communication from OwnArea.com

Current email: ian@mplaser.com

Change to

Submit Change

Change notification email address here

Change password

Old password

New password

Confirm New password

Submit Change

Change login password details here

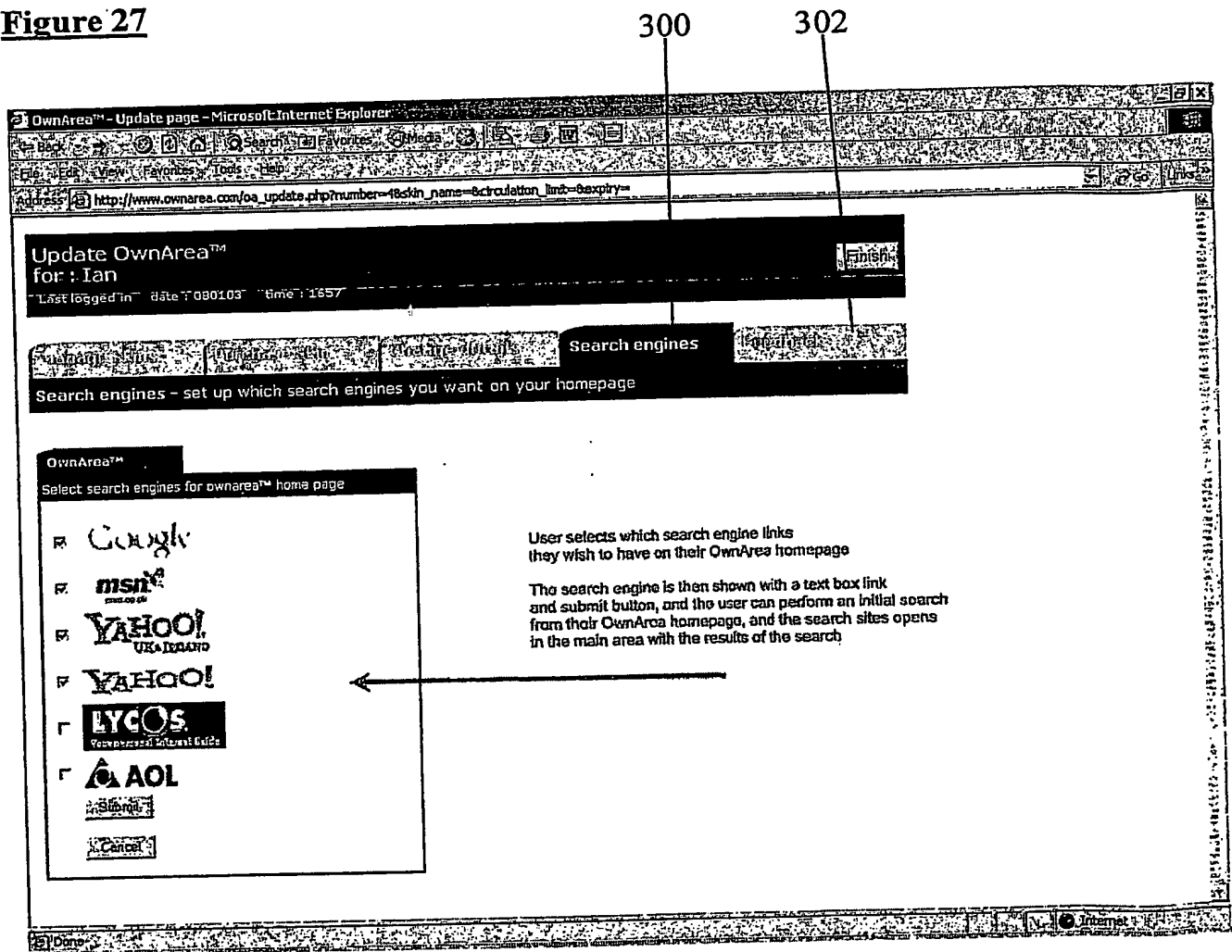
Figure 27

Figure 28

OwnArea™ - Update page - Microsoft Internet Explorer

Search engines - set up which search engines you want on your homepage

Feedback section - we welcome your comments, suggestions or ideas for improvement

Feedback - Send message to skin author

Send message to skin author

If skin author has chosen to allow user feedback with their skin. User may enter message here and message gets sent to registered email address of author

Feedback - Send suggestions to the OwnArea™ team

We welcome any comments or suggestions you may wish to make in order to improve your OwnArea™. Thank you

Suggestion details

User may send message / suggestions to OwnArea operator here

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